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RESEARCH PAPER

Governmental Strategies to Control COVID-19 in Pakistan and India: A Comparative Study

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PAPER INFO	ABSTRACT
	The current study has focused on the governance issues faced to policy implication and practical implications of the decided immediate precautionary measures. It was a qualitative comparative study of developing countries i.e. Pakistan and India as both countries have almost similar health facilities. The study has tested the managerial theory under the sociological theory of corporate governance. It was found that the government precautionary and recovery measures enhanced stress levels among the people. The people were less cooperative to follow the SOPs and favor following the restrictions during the lockdown. Both countries being developing also faced the travel ban to the other countries even after the same normality as in various western countries. The study concluded that the government could not fight and win the people's rigid belief about the uncertainty of the COVID-19 virus and its spread. So, following the government policies was antagonistic to the people's perception and normality acceptance over the borderline. The study opens the platform for further studies to check the governance issues in other developing countries and compare firsthand data. The study will be helpful for the policymaker and law enforcement agencies to understand the flaws of implementing the rules over the laymen.

Introduction

The recent year 2020 has been the most challenging year of history because of social and economic concerns of the COVID-19 crisis. No country is secure of the impact that has been felt over the world. COVID-19 has triggered unmatched

government actions throughout the world. The measures included the closure of the schools, ban on public accumulation, travel restrictions, instant investment in healthcare facilitations, strategies to provide social welfare, tracing system and other inventions associated with controlling the spread of the virus (Hale, Angrist, Goldszmidt, Kira, Petherick, Phillips & Tatlow, 2021).

This pandemic situation affected badly to the developing countries as they were already struggling to become more advanced socially and economically. Their infrastructure is not as powerful and established as the European countries. So, their chain of supply was disrupted because of roads blockages, shutter down of markets, low demands and more production in lockdown (Hawker, 2020). The developing countries have adopted similar measures as were adopted by developing countries to limit the outbreak of COVID-19. The measures in these countries remained slightly less restricted and impractical compared to developed countries. It did not include the tracker system in the pacific areas while imposing the travel constraints and social distancing. Although these measures saved the lives, yet forced the economics of the countries into stagnation (United Nations, 2020).

Resultantly, as demonstrated by the United Nations Development Program (UNDP), the governments of the developing countries not only faced the issue of controlling their public but also losing the income excess to $220 billion. More than 90 developing countries, including Pakistan and India, also approached the International Monetary Fund (IMF) to access emergency funds and financial assistance. Despite all of such critical conditions in the developing countries, the wealthier countries had high death rates and the developing countries were making only 2% of the global death rate as the report of May 2020 (Hawker, 2020).

In Pakistan, the government started to distribute food to the low class and more impoverished people. This protective measure of the government rises the threats of food shortage. In Khebar Pakhaton Khawa and Balochistan provinces, precautions have been implicated in curbing grain and food smuggling over the borders (BabaKhel, 2020). The risk of facing poverty, food insecurity and natural disasters has been increased. The country's population of 24% was also living under the poverty line, and 38.8% was based on the multidimensional Poverty Index. So, the Pakistani economy was projected to be decreased by 2.6% by 2020, according to Asian Development Bank (Augustine, 2020). It creates multiple fears and disorders in the social stability and governance; unimaginable mental stress, adjustment disorder, fear of catching disease and death from hunger and unemployment other than viruses (Humanitarian Response, 2019). The people were tending towards death due to isolation, social boycotting and social distancing. The death rate was also more in neighborhood country India due to economic recession (Mamun & Ullah, 2020).

The role of local government was very crucial to control the pandemic by providing the citizens with possible facilities in such drastic conditions. In India there

are 250,000 local government units because of its vast population. The WHO (2020) report showed that there were several major challenges to control COVID-19 that the local government incorporated because of the nonexistence of substantial policies to fight the pandemic situations. The perception about the virus's existence was also a colossal uncertainty related to the transmission, cure, and infection trajectories that people could not understand easily (Gomes. 2020). So far, in developing countries like India, public attention has focused on the infection spot, specifically in the densely populated metropolitan centers. The rural areas of these countries faced challenges to the conception and implementation of the policies about COVID-19. The public authorities faced challenges to control the infection due to inadequate health facilities, deficient water sanitation and cleaning infrastructure, a high ratio of wage labor migration, crowded living quarters and a low level of awareness of public health (Ranscombe, 2020). The other reasons for worsening and spreading the hunger in such areas were the high ratio of widespread poverty, the weak distribution network of food, considerable dependency on migrant wage labor that also enhanced the economic dislocation (Zetzsche & Consiglio, 2020; Barnett-Howell, Watson & Mobarak, 2020). The bureaucrats also struggled at a low level to diminish the gap between the formalized working institutions that designed policies and the informal and syncretistic world where the policy was expected to implicate (Gupta, 2012).

The preparedness to cope with the outspread of COVID-19 in developing countries Pakistan and India were not up to the mark. Although the government immediately followed the lockdown policy and designed other sustainable policies to control the virus outbreak, the countries' population and their unaware level of accepting the disease reacted drastically. The current study has designed to highlight the governance issue in combating the COVID-19 in Pakistan and India as both counties have similar social and cultural backgrounds and observed a similar level of perception about COVID-19. The study will demonstrate the prepared policies, their implications and the reaction and response of the public associated with them.

The theoretical Framework of the Study

By considering the COVID-19 situation and government decision-making power, the current study used the managerial hegemony theory of corporate governance to provide a theoretical foundation. The managerial theory argues the increasing control of the top management while considering the subordinates' weaknesses. The management is self-serving when its people are passive and dispersed (Hendry & Keil, 2004). The status of dominance is handed over to the professional management and the government plays a supportive role at its best or worst level depends on performance. Moreover, the role of state agencies is also dominant while the government certifies the management decisions (Jonsson, 2005). Keeping in view the managerial hegemony, the policymakers designed the policies in coordination with the current government and some precautionary measures were

also decided to cope with the pandemic situation in Pakistan and India. The implication of these policies were ordered at the provincial and city government levels to control the people's movement and speed up the recovery phase from COVID-19. The role of the people was to obey the ordered decision and the government was also strict about implementing the lockdown, shutter down, travel restrictions and closure of business and shops for a specific duration of time until further notice so that the ratio of COVID-19 positive could dropdown. This is what the managerial hegemony of corporate governance influenced the policy-making and decision-making of the government of both countries. The study will check the influence of government decisions on the people and extent of acceptance by analyzing the public reaction and act upon the decision through the authentic national and international reports based on statistical data of COVID-19 outbreak, control, death ratio and recovery ratio. The reaction of the decisions and policy implicated could be noticed among people's behavior for whom the policies have designed and shape the working strategy, as demonstrated by Keane (2001).

Material and Methods

The current qualitative study is based on the secondary data accumulated from authentic, official websites, including worldbank.org, ourworldindata.org, covid.gov.pk, mygov.in, un.org. The study included the statistical reports of 2020-21 of two countries: Pakistan and India. The rationality of selecting these two countries was based on the similar cultural and social aspects based on their originality, religious socialization and customs as found by Vadher and Barrett (2009). The data was analyzed by the implication of Qualitative comparative analysis with various themes based on the governmental notions, its implementation, reaction and control on COVID-19. The analysis was also based on the designed policies in the emergency along with the records of international reports via authenticated and recognized sources as done by Hasell, Mathieu, Beltekian, Macdonald, Giattino, Ortiz-Ospina & Ritchie, 2020). The government stringency index, schools and workplaces closure, cancelation of public events and gatherings, stay at home restrictions, face covering, public information campaigns, international and domestic travel, testing and contact tracing, vaccination policy, income support and debt relief, google mobility trend. The level of strictness and restriction was measured from 0-100 and the other levels were mentioned along with graphical representation. The other themes were included the establishment of isolation centers, provision of ration bags and introduction of websites and mobile applications according to the nature of the study.

Results and Discussion

The first case of COVID-19 in Pakistan was confirmed on February 26, 2020, and in India on January 27, 2020. The results found that the total cases of COVID-19 in Pakistan were 962,313 (0.49) and in India 30,585,229 (2.3), which were 0.49% and 2.3% on average of the total population, respectively. In comparison, the percentage

of the budget as per GDP spent on health is more in India (4.69%) than in Pakistan (2.61%). Regarding the confirmed cases of COVID-19, India stands among the country with the second most confirmed case after the United States (WHO, 2021). The Indian government announced the implication of lockdown on March 26, 2020, while Pakistan declared it on April 1, 2020. The governments imposed the lockdown based on the government stringency index, schools and workplaces closure, cancelation of public events and gatherings, stay at home restrictions, face covering, public information campaigns, international and domestic travel, testing and contact tracing, vaccination policy, income support and debt relief, google mobility trend. The other themes included establishing isolation centers, provision of ration bags, and introduction of websites and mobile applications to be updated about COVID-19 during the lockdown and acute condition of pandemic spread.

Government Stringency Index

Stringency Index

The extent of implication and strictness in stringency index was 63.89 from 0-100 scale point in Pakistan, while in India, it was 81.94, as shown in Figure 1.
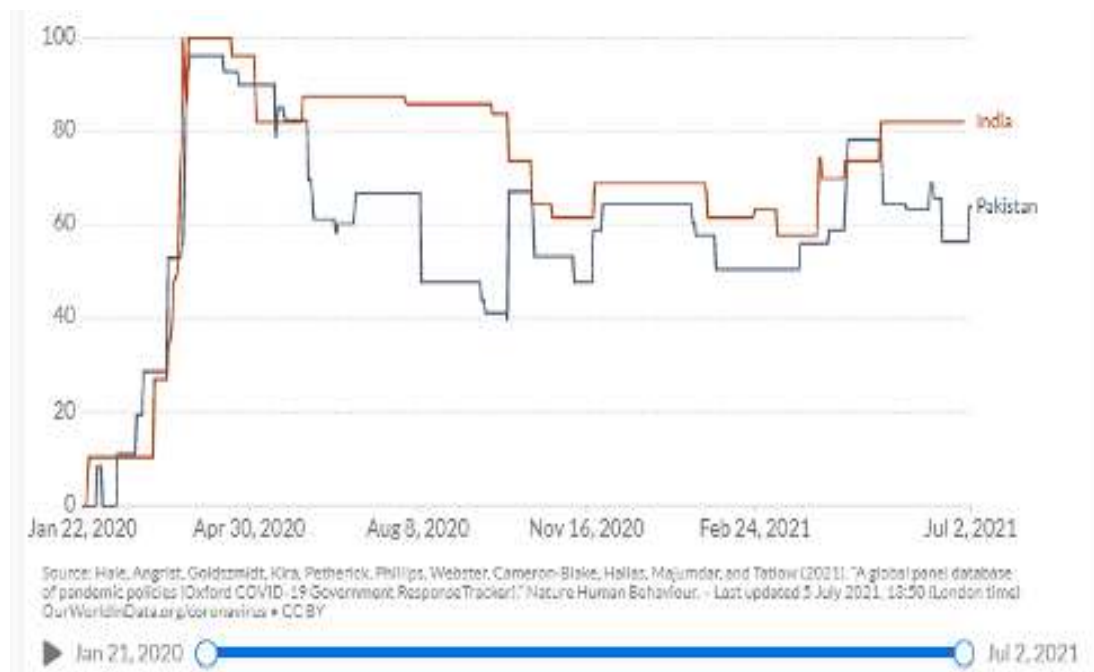

Figure 1: Graphical representation of stringency index of Pakistan and India

Containment and Health Index

The theme of containment and health index showed that the strictness in Pakistan to act upon the applied health-related policies scored 65.24 while it was more in India with a score of 79.82. It means that the Indian public was more conformist to the governmental policies related to health issues, as shown in Figure 2.
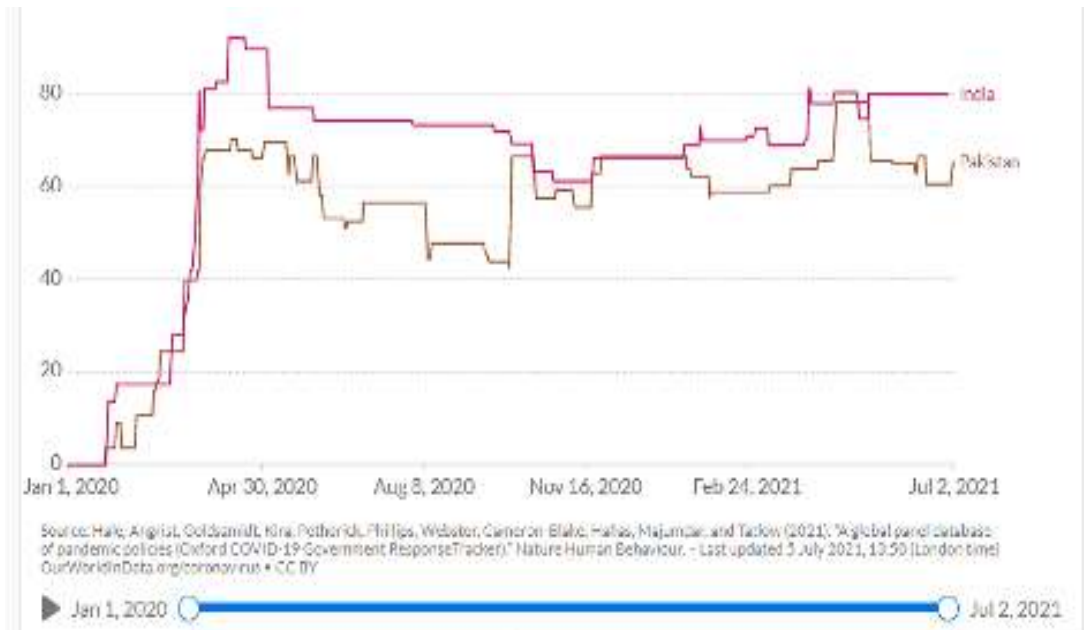

Figure 2: Graphical representation of containment and health index of Pakistan and India

School and Workplace Closure

Furthermore, school and workplace closure was required to apply at some regions on required levels in Pakistan by keeping in view the extent of virus spread while the report declared to close the schools and workplaces at all levels in India *due* to the severity of spread COVID-19. Only a few key workplaces were felt to remain open in India depend on the necessities of life.

Cancellation of public events and gatherings

Cancellation of Public Events

The theme of the cancellation of public events was required cancellation equally in Pakistan and India. These public events include marriage ceremonies, birthday gatherings, religious gatherings, celebrations of cultural and religious festivals, gathering at mosques, temples and clubs, etc.

Restrictions on public gatherings

The theme of restrictions on public gatherings showed a similar decision implication in both countries that allowed the gathering of fewer than ten people.

Stay at Home Restriction

The next theme of stay at home in the situation of COVID-19 found that it has recommended to the Pakistani public not to leave the house. Nevertheless, in the case of India, the theme of stay at home required the Indian community not to leave the house but with minimal expectations. It showed that they were advised and allowed to leave the house only once in few days and only one person at one time.

Face Covering

The next theme of face covering showed that the face-covering strategy was required in all public places in Pakistan. On the other hand, the face-covering restriction was required outside the home in India due to the COVID-19 severe outspread.

Public Information Campaign

Furthermore, the theme of the public information campaign found that Pakistan and India coordinated the information campaign for the awareness of its public.

Public Transport

The theme of public transport closure showed that for Pakistan, it was recommended to close or low the volume of travel. While in the case of India, there was the acute requirement to close and prohibit public transport for the control of COVID-19 outspread. Similarly, actions were recommended in internal movement restrictions and required for Pakistan and India, respectively.

Moreover, international travel control during the COVID-19 outbreak found the screening was necessary for the incoming and outgoing travelers with the latest COVID-19 negative report of the last 48 hours. Contradictory to it, the Indian people were banned from moving to high-risk areas and people from high-risk areas were also banned from moving independently even with screening.

Testing policy and contact tracing

i)   **Testing policy**

The next theme of testing policy found that it was better in Pakistan as it was offering an open public testing strategy and allowed asymptomatic people along with symptomatic people to test. On the other hand, in India, only those were tested who had symptoms of COVID-19. The difference was due to the extent of the virus spread and the healthcare department's budget. The severity of the second wave in India shocked the economy and people's belief in the existence of such a virus when they looked at the dead bodies on roads and extreme conditions of breathing problems with the unavailability of ventilators. So, by keeping in view such drastic conditions, it was difficult for the Indian government to offer anyone testing service because it needed laboratory equipment, trained staff, medical staff and equipment that was not possible for the Indian government to manage at once. So, they restricted their testing strategy to the people with symptoms.

ii)   **Contact tracing**

While in contact tracing, both countries were far from the advanced technological strategies implication and introduction. Pakistan and India had only some cases that could be traced based on their priority and VIP trend. But for the general public, no contact tracing system was adopted.

Vaccination

The next step was vaccination found a similar strategy of availability of vaccination to the citizens of both countries. The vaccination was available for the front liners, clinical staff, older people, key workers and other age groups. In Pakistan, at the first step, the vaccination was offered to those working as front liners and medical staff. Then the government announced the smart system of registration via SMS for elderly persons over the age of 60. The next step was to offer the registration SMS on 1166 over 40 and then 30 years' old when the earlier groups have already taken their first dose of vaccination. Similarly, the government of India also started the vaccination procedure under the same strategy and introduced official website, to register, record and offer the detail of COVID-19 new cases, deaths and vaccination updates. Pakistan also introduced the website name covid.gov.pk with detailed COVID-19 and its control with vaccination and recovered cases.

Income support and debt relief

The aim of income support and debt relief showed that the Pakistan government managed to compensate the loss of jobs to the workers and laborers by providing them income support. The government also announced scholarships of RS 12000 once for those who were needy and poor. In contrast to it, the results found that the Indian government was providing no income support to its citizens. Similarly, in relieving its people about debt and contract, the Pakistani government provided broad relief to the citizens by freezing their financial obligations such as

loan payments and preventions from services including water and gas or ban the evictions. On the other hand, the Indian government provided narrow relief to the citizens in the pandemic situation. That was also the reason for restlessness among Indian citizens due to the less cooperative behavior of the Indian government and the more severe condition of coronavirus.

Google Mobility Trends

The last but not least theme of Google mobility trends showed the interesting facts about the lockdown and movement control in Pakistan and India based on the number of new cases and death ratio due to COVID-19. The graph shows the trends in visiting the different places over the period in Pakistan. The majority of the people visited the grocery stores and pharmacy stores until July 30, 2021. The extent of visiting the grocery store and pharmacy stores dropped to -54.57 in May 2021 when the second wave attacked Pakistan badly. But within days, due to strict Movement Control Order, the ratio of positive cases and deaths dropped down and people visited the grocery and pharmacy stores (49.43%), transit stations (28.00%), parks (23.57%), retail and recreation centers (22.86%) and workplaces (11.29%) by keep visiting or remain at their residential place with the negative trend (-4.14%).
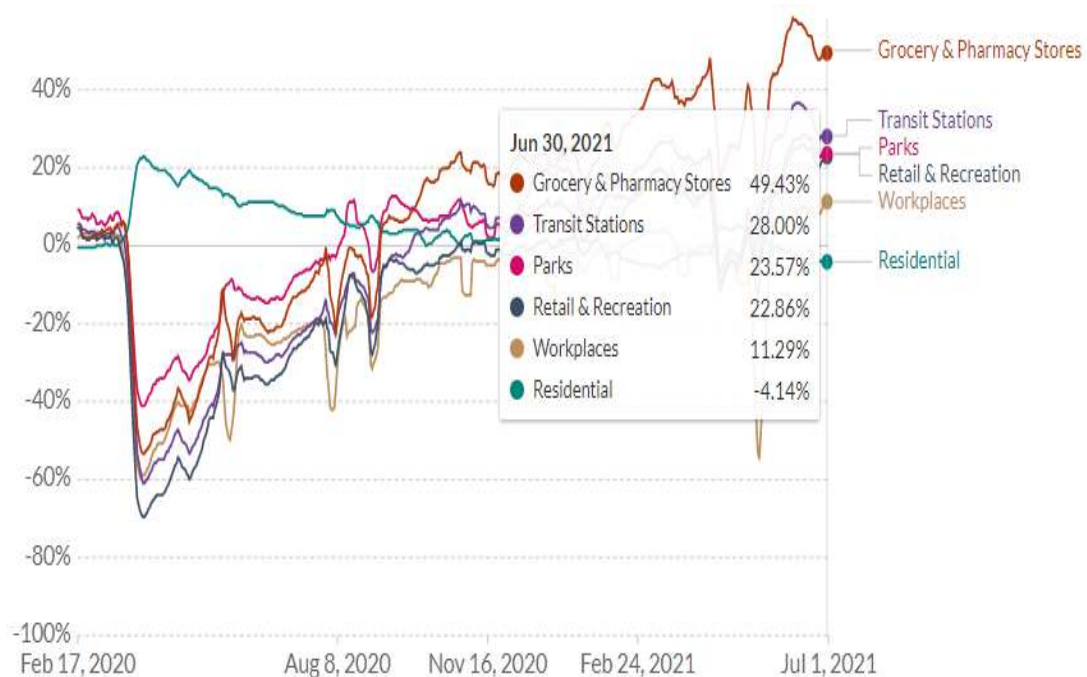

Figure 3: Graphical representation of google mobility trends of Pakistan

While in India, the most positive trend of visiting had been noticed among residential and people moved to their hometowns when the disease caught its extreme condition. They also lost their jobs and did not have any place to live in the city. So, their residential (12.29%) visits were more than any other category of visitors. The least visited place was the retail and recreational place (32.00%) along with the workplace (25.71%). Moreover, people visited the grocery and pharmacy stores (11.57%) based on their needs but in restricted manners. At the same time, the visit to parks (-17.71%) and transit stations (-21.00%) was also trending towards negative as the people were not interested in visiting such places in this pandemic situation due to the fear of catching and spreading the virus.

Figure 4: Graphical representation of google mobility index of India.

Retail and recreational policy

The detail of retail and recreational places included visiting restaurants, cafes, theme parks, museums, shopping centers, movie theaters and libraries. The extent of visiting places was more in Pakistan (23.43%) with a positive trend than in India (-31.29%) depended on the outspread and control of COVID-19 in both countries.

Figure 5: Graphical representation of retail and recreational policy of Pakistan and India

Isolation centers

The analysis showed that the Pakistani government successfully established isolation centers in all provinces with all basic facilities. The buildings of university hostels, hotels, state's assets buildings, colleges halls and rooms during lockdown were turned into isolation centers for social distancing and curing the COVID-19 positive patients. The government managed to establish 215 medical facilities for isolation with 1942 beds in the four provinces of Pakistan (covid.gov.pk). While on the other hand, the Indian government directed its people to self-quarantine at home and suggested measures (mygov.in). Moreover, they also converted many five-star hotels into quarantine centers with paid policies. A news source also showed that a train had been converted to the isolation center in India (Nandi, 2020). Another source declared that the Muslims of India offered the mosques and schools to convert into isolation centers and managed the medical facilities there. A mosque could manage to provide the space of isolation to almost 50 COVID-19 patients (The Express Tribune, 2021).

Provision of ration bags

The government of Pakistan also took the action of providing free ration bags to the needy and the poor people and families who lost their jobs due to lockdown and low working labor demand (The Dawn, 2021). Similar actions were also taken to India's limited and specified areas, most inclusively Kerela, where these ration bags contain all the necessary items of cooking and home management (The Hindu, 2020).

Introduction of websites and mobile applications

In the pandemic situation of COVID-19 outspread, the countries needed to be updated with the developed system. By keeping in view, it was found by the data that Pakistan has introduced the official website www.covid.gov.pk and www.ncoc.gov.pk and India introduced the website like www.mygov.in , www.mohfw.in , www.covid19india.org. These websites contain authentic, verified and updated information about new cases, deaths, recovery cases, total cases and vaccination-related information.

Discussion

The present study was designed to check the governmental steps and policies to control the spread of COVID-19 in Pakistan and India. The people's response was taken as the reactions of the actions by the governmental bodies in comparative manners between Pakistan and India. It was found by the literature information from the authentic sources about COVID-19 that India spent more percentage of its economic earing than the budget spent by the government of Pakistan. But India was facing more outspread of the virus than Pakistan despite its multiple projects to facilitate its people. So, the strictness on government stringency index was more in India than Pakistan due to the widespread of the COVID-19. The results also showed that the closure of the schools and workplaces was more strictly followed in India than in Pakistan. The study of Ilyas, Azuine and Tamiz (2020) also confirmed the closure of schools in all provinces of Pakistan. Another study by Kasturkur and Gawai (2020) also found the COVID-19 impact on education by the closure of schools' academic institutions. The workplace closure exerted pressure on the employability of the people due to COVID-19. Most workplaces have been closed other than necessary institutions that managed to provide accessories of daily life needs. The study also found the equal effect of restriction policy on public gatherings and events. Similar results were also found by Parikh et al. (2020) in India and Farooq, Khan and Khan (2020) in Pakistan in which the government decided to ban the public gathering at marriage ceremonies, mosques and occasional celebrations and people were following these restrictions under the pressure of police and other administrative institutions. The policy of staying at home was restricted in India while it was recommended for Pakistan depended on the cases and the studies of Akram and Meo (2020) and Sahu, Mishra, Lal and Sahu (2020) supported the findings. The study also found that face-covering was required in public gatherings in Pakistan.

Moreover, in India, face-covering was required outside the house due to the severity of the COVID-19. This finding was parallel to the study of Mahmood, Crimbly, Khan, Choudry and Mehwish (2020) that confirmed the use of face masks in Pakistan. In contrast, the finding was contrasted to the study of Jindal, Aggarwal,

Christopher, Dhar and Jindal (2020) that showed the alternative use of face masks in the shape of handkerchief and scarf. Furthermore, public information campaign was found helpful to aware the citizens about the preventions and precautions from COVID-19, similar to the study of Banerjee et al. (2020) and Salman et al. (2020). The study also found the acute travel ban requirement for India than Pakistan in contrast to the finding of Abdullah et al. (2021) that demonstrated the significant travel of the citizens to their primary living places due to this pandemic spread. Another study of Meena (2020) from India was in contrast to the findings that found the control of internal travel control; instead, people started using bikes and motorbikes to travel interstate, which was a deviancy of travel policy. The data also disclosed the allowed international travel for the Pakistani citizens with screening while in India, the citizens were not allowed to travel internationally, as Gulia, Panda and Prikh (2020) found. The next finding of the study explored that in Pakistan, testing services were available openly to all people symptomatic or asymptomatic, but in Indian, only the patients with the high risk were tested. This finding was in contrast to the findings of Gupta et al. (2020) but parallel to the findings of Waris et al. (2020), who found more lab test services available to the Pakistani public than its resources. The findings regarding contact tracing demonstrated the need for more technological advances for contact tracing as both countries were behind in this race. This finding was in contrast to the research of Sun et a. (2020), who misinterpreted the National Action Plan of Pakistan for contact tracing along with the control of the COVID-19 epidemic. Similarly, the study of Lancet (2020) was also in contrast to the findings as it described the advanced medical facility as one of the factors of contact tracing. The current study data also revealed the vaccination process starting in Pakistan and India with the updating system of website and mobile SMS as found by Bhuyan (2021) and Malik, Malik and Ishaq (2021). The study also revealed the collapse of economic condition of both countries under which they requested debt from the IMF that had approved for Pakistan but not for India, as confirmed by Asghar et al. (2020). Meanwhile, the global mobility trend in Pakistan and India was showing more mobility to the pharmaceutical stores than any other category due to the general spread of viruses and fear. This finding was parallel to the study of Saha, Barman and Chouhan (2020) and Ali, Ahmed and Hassan (2020). The study also disclosed the establishment of temporary isolation centers for the quarantine purpose at different schools, colleges and hostels building as found by Nafees and Khan (2020) and Shah, Shah and Shah (2020). The pandemic situation also made the government manage the free food distribution among its people, which was more generally practiced in Pakistan than in India. The findings of Das, Khan and Tinsley (2020) also support the results regarding Pakistan and the study of Kavish (2021) supported the Indian government's free food distribution in some areas. The last theme of the study showed that the launching of COVID-19 related websites and mobile applications in Pakistan and India helped the people be aware and updated about the spread, control and current trends, as confirmed by Pandey and Pal (2020) and Azad et al. (2020). So,

the study found that the difference in policy implications of Pakistan and India affected the rate of COVID-19 spread. Stricter action is needed in India to control the virus than in Pakistan. The implication of managerial hegemony theory of corporate governance in the current study demonstrated the influence of government and management of the countries; Pakistan and India helped to cope with the pandemic situation as the strict action of governments forced the people to act upon the policy willingly or unwantedly under the control system. It is the government and policymakers who could make the severe condition of the virus spread into the normal circumstances. In this way, the current study confirms the managerial hegemony theory of corporate governance implications to direct the actions of its public under any condition.

Conclusion

The study concludes that the difference of governing bodies of both countries inserted the pressure on designing and implementing the policies over the people under any pandemic circumstances. The government of India was facing more challenging to control the COVID-19 situation than Pakistan due to the huge population and level of people's awareness. There is the need to invest more in health departments and establish temporary health care units in both countries, especially in India, to control the current out-of-control outspread of COVID-19. The study leaves the room to analyze the governance issue through first-hand data from controlling bodies and law enforcement agencies to have practical insight.

Policy implication: The study will be helpful for the policymakers to gain insight into the governance policies and issues of implication in Pakistan and India. It will also contribute to the academic sector by providing a comparative analysis of governance policies by referencing authentic international reports and analyses.

References

Abdullah, M., Ali, N., Hussain, S. A., Aslam, A. B., & Javid, M. A. (2021). Measuring changes in travel behavior pattern due to COVID-19 in a developing country: A case study of Pakistan. *Transport Policy*, *108*, 21-33.

Akram, J., & Meo, S. A. (2020). Pakistan role in COVID-19 pandemic. *Biomedica*, *36*, 1-4.

Ali, A., Ahmed, M., & Hassan, N. (2020). Socioeconomic impact of COVID-19 pandemic: Evidence from rural mountain community in Pakistan. *Journal of Public Affairs*, e2355.

Asghar, N., Batool, M., Farooq, F., & Ur Rehman, H. (2020). COVID-19 pandemic and Pakistan economy: A preliminary survey. *Review of Economics and Development Studies*, *6*(2), 447-459.

Augustine, B.D., (2020). COVID-19 to slowdown Pakistan's economic growth: *Asian Development Bank*. Retrieved from https://gulfnews.com/business/covid-19-to-slowdown-pakistans-economic-growth-asian-development-bank-1.70803457.

Azad, M. A., Arshad, J., Akmal, S. M. A., Riaz, F., Abdullah, S., Imran, M., & Ahmad, F. (2020). A first look at privacy analysis of COVID-19 contact tracing mobile applications. *IEEE Internet of Things Journal*.

BabaKhel M., A. (2020), Covid and Governance. Dawn News. Retrieved from Covid & governance - Pakistan - DAWN.COM

Banerjee, A., Alsan, M., Breza, E., Chandrasekhar, A. G., Chowdhury, A., Duflo, E., ... & Olken, B. A. (2020). *Messages on COVID-19 prevention in India increased symptoms reporting and adherence to preventive behaviors among 25 million recipients with similar effects on non-recipient members of their communities* (No. w27496). National Bureau of Economic Research.

Barnett-Howell, Z., Watson, O. J., & Mobarak, A. M. (2021). The benefits and costs of social distancing in high-and low-income countries. *Transactions of the Royal Society of Tropical Medicine and Hygiene*.

Bhuyan, A. (2021). India begins COVID-19 vaccination amid trial allegations. *The Lancet*, *397*(10271), 264.

Das, M. B., Khan, I. A., & Tinsley, E. (2020). Results-Based Financing Through Social Enterprises.

Farooq, F., Khan, J., & Khan, M. U. G. (2020). Effect of Lockdown on the spread of COVID-19 in Pakistan. *arXiv preprint arXiv:2005.09422*.

Gomes, C. (2020). Report of the WHO-China Joint Mission on Coronavirus Disease 2019 (COVID-19). *Brazilian Journal of Implantology and Health Sciences*, *2*(3).

Gulia, A., Panda, P. K., & Parikh, P. (2020). India and COVID–19 Pandemic-Standing at Crossroad. *Indian Journal of Medical Sciences*, *72*(1), 1.

Gupta, A. (2012). *Red tape: Bureaucracy, structural violence, and poverty in India*. Duke University Press.

Gupta, M., Mohanta, S. S., Rao, A., Parameswaran, G. G., Agarwal, M., Arora, M., ... & Bhatnagar, S. (2021). Transmission dynamics of the COVID-19 epidemic in India and modeling optimal lockdown exit strategies. *International Journal of Infectious Diseases*, *103*, 579-589.

Hale, T., Angrist, N., Goldszmidt, R., Kira, B., Petherick, A., Phillips, T., ... & Tatlow, H. (2021). A global panel database of pandemic policies (Oxford COVID-19 Government Response Tracker). *Nature Human Behaviour*, *5*(4), 529-538. Retrieved from https://doi.org/10.1038/s41562-021-01079-8

Hasell, J., Mathieu, E., Beltekian, D., Macdonald, B., Giattino, C., Ortiz-Ospina, E., ... & Ritchie, H. (2020). A cross-country database of COVID-19 testing. *Scientific data*, *7*(1), 1-7.

Hawker, E. (2020). COVID-19: The Impact on the developing Economies. *Business Because* retrieved from COVID-19: The Impact On Developing Economies (businessbecause.com)

Hendry, K., & Kiel, G. C. (2004). The role of the board in firm strategy: Integrating agency and organisational control perspectives. *Corporate Governance: An International Review*, *12*(4), 500-520.

Humanitarian Response. (2020). Humanitarian Response Baluchistan Drought Needs Assessment (BDNA) report. Retrieved from https://www.humanitarianresponse.info/en/operations/pakistan/document/balochistan-drought-needs-assessme nt-bdna-report-february-2019 .

Ilyas, N., Azuine, R. E., & Tamiz, A. (2020). COVID-19 pandemic in Pakistan. *International Journal of Translational Medical Research and Public Health*, *4*(1), 37-49.

Jindal, S. K., Aggarwal, A. N., Christopher, D. J., Dhar, R., & Jindal, A. (2020). Cloth face covers—a sustainable measure to mitigate COVID-19. *Int J Tuberc Lung Dis*.

Jonsson, E. I. (2005). The role model of the board: A preliminary study of the roles of Icelandic boards. *Corporate Governance: An International Review*, *13*(5), 710-717.

Kanozia, R., & Arya, R. (2021). "Fake news", religion, and COVID-19 vaccine hesitancy in India, Pakistan, and Bangladesh. *Media Asia*, 1-9.

Kasturkar, P. R., & Gawai, J. P. (2020). Engaging School Going Children During COVID-19 Lockdown. *Journal of Clinical & Diagnostic Research*, *14*(8).

Kavish, M. S. (2021). India's response to covid-19 and migration challenges. International journal of humanities and social sciences research. *7*(1), 13-18.

Keane, C. R. (2001). Managerial hegemony, cultural change, and the transformation of infant care advice in the United States in the twentieth century. *International Journal of Health Services*, *31*(1), 167-186.

Lancet, T. (2020). India under COVID-19 lockdown. *Lancet (London, England)*, *395*(10233), 1315.

Mahmood, S. U., Crimbly, F., Khan, S., Choudry, E., & Mehwish, S. (2020). Strategies for rational use of personal protective equipment (PPE) among healthcare providers during the COVID-19 crisis. *Cureus*, *12*(5).

Malik, A., Malik, J., & Ishaq, U. (2021). Acceptance of COVID-19 vaccine in Pakistan among health care workers. *medRxiv*.

Mamun, M. A., & Ullah, I. (2020). COVID-19 suicides in Pakistan, dying off not COVID-19 fear but poverty?–The forthcoming economic challenges for a developing country. *Brain, behavior, and immunity*, *87*, 163.

Meena S. (2020) Impact of novel Coronavirus (COVID-19) pandemic on travel pattern: A case study of India. Indian Journal of Science and Technology. 13(24): 2491-2501. https://doi.org/10.17485/IJST/v13i24.958

Nafees, M., & Khan, F. (2020). Pakistan's Response to COVID-19 Pandemic and Efficacy of Quarantine and Partial Lockdown: A Review. Electron J Gen Med. 2020; 17 (2): emXXX.

Nandi, S. (2020). COVID-19 railways to turn coaches into isolation centers for patients. *The Live Mint*. Retrieved from COVID-19: Railways to turn coaches into isolation centre for patients (livemint.com)

Pandey, N., & Pal, A. (2020). Impact of digital surge during Covid-19 pandemic: A viewpoint on research and practice. *International journal of information management*, *55*, 102171.

Parikh, P. A., Shah, B. V., Phatak, A. G., Vadnerkar, A. C., Uttekar, S., Thacker, N., & Nimbalkar, S. M. (2020). COVID-19 pandemic: knowledge and perceptions of the public and healthcare professionals. *Cureus*, *12*(5).

Ranscombe, P. (2020). Rural areas at risk during COVID-19 pandemic. *The Lancet. Infectious Diseases*, *20*(5), 545.

Saha, J., Barman, B., & Chouhan, P. (2020). Lockdown for COVID-19 and its impact on community mobility in India: An analysis of the COVID-19 Community Mobility Reports, 2020. *Children and youth services review*, *116*, 105160.

Sahu, K. K., Mishra, A. K., Lal, A., & Sahu, S. A. (2020). India fights back: COVID-19 pandemic. *Heart & Lung: The Journal of Cardiopulmonary and Acute Care*, *49*(5), 446-448.

Salman, M., Mustafa, Z. U., Asif, N., Zaidi, H. A., Hussain, K., Shehzadi, N., ... & Saleem, Z. (2020). Knowledge, attitude and preventive practices related to COVID-19: a cross-sectional study in two Pakistani university populations. *Drugs & Therapy Perspectives*, *36*(7), 319-325.

Schmitter, P.C. 2019. Defining, explaining and then, exploiting the elusive concept of "Governance." *Fudan Journal of the Humanities and Social Sciences* 12 (4): 547–567. https://doi.org/10.1007/s40647-018-0236-9.

Shah, J. N., Shah, J., & Shah, J. (2020). Quarantine, isolation and lockdown: in context of COVID-19. *Journal of Patan Academy of Health Sciences*, *7*(1), 48-57.

Sun, R., Wang, W., Xue, M., Tyson, G., Camtepe, S., & Ranasinghe, D. (2020). Vetting security and privacy of global covid-19 contact tracing applications. *arXiv preprint arXiv:2006.10933*.

The Dawn. (2021). Favoutrism, political infighting mar COVID-19 relief operations in Sindh. *The Dawn News.* Retrieved from Favouritism, political infighting mar Covid-19 relief operations in Sindh - Pakistan - DAWN.COM

The Express Tribune. (2021). Indian Muslims turn mosques, schools into Covid centres. *The express tribune.* Retrieved from Indian Muslims turn mosques into Covid centres (tribune.com.pk)

Ullah, A., Pinglu, C., Ullah, S. *et al.* The Role of E-Governance in Combating COVID-19 and Promoting Sustainable Development: A Comparative Study of China and

Pakistan. *Chin. Polit. Sci. Rev.* **6,** 86–118 (2021). https://doi.org/10.1007/s41111-020-00167-w

United Nation. (2020). UN/DESA Policy Brief #66: COVID-19 and the least developed countries. *United Nation Department of Economic and Social Affairs Economic Analysis.* Retrieved from COVID-19 and the least developed countries | Department of Economic and Social Affairs

Vadher, K., & Barrett, M. (2009). Boundaries of Britishness in British Indian and Pakistani young adults. *Journal of Community & Applied Social Psychology*, *19*(6), 442-458.

Waris, A., Atta, U. K., Ali, M., Asmat, A., & Baset, A. J. N. M. (2020). COVID-19 outbreak: current scenario of Pakistan. *New Microbes and New Infections*, *35*, 100681.

Zetzsche, D. A., & Consiglio, R. (2020). One Million or One Hundred Million Casualties?–The Impact of the COVID-19 Crisis on the Least Developed and Developing Countries. *University of Luxembourg, Law Working Paper Series*, *8*.